

**Notice of Allowability**

Application No.

10/021,450

Examiner

Peter Poltorak

Applicant(s)

HALASZ ET AL.

Art Unit

2134

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to applicant's amendment filed on 10/110/06 and a telephone conversation on 11/08/06.
2. ☒ The allowed claim(s) is/are 1,3,5,8,9 and 23-26.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of the:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.  
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached  
1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.  
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

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|--|---|
| 1. <input type="checkbox"/> Notice of References Cited (PTO-892)   | 5. <input type="checkbox"/> Notice of Informal Patent Application                     |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 6. <input type="checkbox"/> Interview Summary (PTO-413),<br>Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),<br>Paper No./Mail Date _____    | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment                   |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br>of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance  |
|  | 9. <input type="checkbox"/> Other _____   |

**DETAILED ACTION**

1. This Office Action is in response to Applicant's amendment filed on 10/10/06.

***Examiner Amendment***

2. An Examiner's Amendment to the record appears below. Should the changes and/or additions be unacceptable to Applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the Issue Fee.

The following changes were authorized (and permission to make same by Authorization for this Examiner's Amendment was given in a telephone interview with Larry Donovan (216.696.3864) on 11/08/06.

3. Please cancel claims 10, 12, 14, 16-17 and 19-20.
4. Please amend claims 1 and 23-26 as follows:

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1. A method for servicing a Virtual Local Area Network (VLAN) comprising:
  - maintaining a table associating broadcast keys with VLANs at an access point;
  - receiving a request for access to a network from a wireless station by the access point;
  - authenticating the wireless station with an authentication server responsive to the request by the access point;
  - responsive to receiving from the authentication server data identifying a VLAN for the wireless station by the access point

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accessing the table maintained at the access point to determine an appropriate broadcast key for the VLAN identified by the authentication server; and transmitting the appropriate broadcast key to the wireless station by the access point.

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23. A system comprising:

a first access point, the first access point configured with a first table for associating a first set of encryption keys with Virtual Local Area Networks (VLANs);

a second access point, the second access point configured with a second table for associating a second set of encryption keys with VLANs;

an authentication server communicatively coupled to the first access point and the second access point;

wherein the first access point responsive to an association request from a wireless station authenticates the wireless station with the authentication server, the first access point receiving data from the authentication server identifying a VLAN associated with the wireless station, the first access point being responsive to receiving the data identifying the VLAN associated with the wireless station to access the first table and determine a first appropriate broadcast encryption key from the first set of encryption keys for the VLAN associated with the wireless station and the first access point is configured to

communicate the first ~~appropriate~~ broadcast encryption key to the wireless station; and

wherein the second access point responsive to an association request from the wireless station authenticates the wireless station with the authentication server, the second access point receiving data from the authentication server identifying the VLAN associated with the wireless station, the second access point being responsive to receiving the data identifying the VLAN associated with the wireless station to access the second table and determine a second ~~appropriate~~ broadcast encryption key from the second set of encryption keys for the VLAN associated with the wireless station and the second access point is configured to communicate the second ~~appropriate~~ broadcast encryption key to the wireless station.

24. A system according to claim 23, wherein the first access point is configured to dynamically assign an encryption key as the first ~~appropriate~~ broadcast encryption key for the VLAN associated with the wireless station ~~responsive to no encryption key in the first set of encryption keys being associated with the VLAN associated with the wireless station.~~

25. A system according to claim 23, wherein the first access point receives a session key for the wireless station from the authentication server, the first access point is responsive to encrypt the first ~~appropriate~~ broadcast encryption

key with the session key prior to communicating the first ~~appropriate~~ broadcast encryption key ~~with~~ to the wireless station.

26. A system according to claim 23, the first access point is responsive to receiving one of a group consisting of a broadcast packet and a multicast packet for the VLAN associated with the wireless station to transmit the one of the group consisting of the broadcast packet and the multicast encrypted with the first ~~appropriate~~ broadcast key.

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***Examiner's Statement of Reasons for Allowance***

5. Claims 1, 3, 5, 8-9 and 23-26 are allowed.

The following is a statement of reasons for the indication of allowable subject matter.

6. Applicant invention is directed towards receiving a request from a wireless station for access to a network from a wireless station, authentication the wireless station with the authentication server and upon receiving from the authentication server data identifying a VLAN for the wireless station, accessing the table maintained at the access point to determine an appropriate broadcast key for the VLAN, identified by the authentication server and transmitting the appropriate broadcast key to the wireless station by the access point.
7. The closest prior art Ichikawa (U.S. Patent No. 6307837) discloses receiving a request from a wireless station for access to a network from a wireless station,

authentication the wireless station with the authentication server and upon receiving from the authentication server data identifying a VLAN for the wireless station and an appropriate broadcast key and transmitting the appropriate broadcast key to the wireless station by the access point.

8. Ichikawa does not disclose "responsive to receiving from the authentication server data identifying a VLAN for the wireless station by the access point accessing the table maintained at the access point to determine an appropriate broadcast key for the VLAN identified by the authentication server".
9. Introducing these limitations would not have been obvious to one of ordinary skill in the art. The prior art, fails to anticipate or fairly suggest the limitation of applicant's independent claims, in such a manner that a rejection under 35 U.S.C. 102 or 103 would be proper. As a result the claimed invention is considered to be in condition for allowance as being novel and non-obvious over prior art.

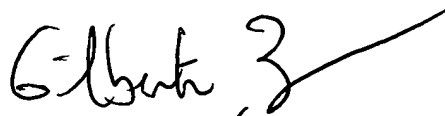
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on statement of Reasons for Allowance".

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Poltorak whose telephone number is (571) 272-3840. The examiner can normally be reached from Monday through Thursday from 9:00 until 5:00, and every other Friday from 9:00 until 5:00.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jacques Louis Jacques can be reached on (571) 272-6962. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (571) 272-1600.

  
11/8/06

  
GILBERTO BARRON JR  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2100